WHAT IS CLAIMED IS:

1. A surface acoustic wave (SAW) device, comprising:

a piezoelectric substrate;

a conductive layer located over said piezoelectric substrate; and

a resistive layer, interposing a portion of said conductive layer and said piezoelectric substrate, that forms a return path for static charge migrating from said piezoelectric substrate to said conductive layer.

2. The SAW device as recited in Claim 1 wherein said piezoelectric substrate comprises one selected from the group consisting of:

bismuth germanium oxide,

gallium arsenide,

lithium borate,

lithium niobate,

lithium tantalate,

langasite,

lead zirconium tantalate, and

quartz.

3. The SAW device as recited in Claim 1 wherein said conductive layer comprises one selected from the group consisting of:

aluminum,

copper,

gold,

silver,

platinum, and

palladium.

4. The SAW device as recited in Claim 1 wherein said resistive layer comprises one selected from the group consisting of:

silicon,

titanium,

zirconium,

hafnium,

vanadium,

niobium,

tantalum,

molybdenum,

tungsten,

chromium,

nitrides thereof, and

carbides thereof.

5. The SAW device as recited in Claim 1 wherein said resistive layer couples a selected signal pad to one of a plurality of ground pads.

6. The SAW device as recited in Claim 1 wherein said resistive layer is interposed between an entirety of a pad portion of said conductive layer and said piezoelectric substrate.

7. The SAW device as recited in Claim 1 wherein said SAW device comprises two signal pads and four ground pads and said resistive layer is divided into portions that span said two signal pads and said four ground pads.

8. A method of manufacturing a surface acoustic wave (SAW) device, comprising:

providing a piezoelectric substrate;

forming a conductive layer over said piezoelectric substrate; and

creating a resistive layer between a portion of said conductive layer and said piezoelectric substrate, said resistive layer forming a return path for static charge migrating from said piezoelectric substrate to said conductive layer.

9. The method as recited in Claim 8 wherein said piezoelectric substrate comprises one selected from the group consisting of:

bismuth germanium oxide,

gallium arsenide,

lithium borate,

lithium niobate,

lithium tantalate,

langasite,

lead zirconium tantalate, and

quartz.

10. The method as recited in Claim 8 wherein said conductive layer comprises one selected from the group consisting of:

aluminum,

copper,

gold,

silver,

platinum, and

palladium.

11. The method as recited in Claim 8 wherein said resistive layer comprises one selected from the group consisting of:

silicon,

titanium,

zirconium,

hafnium,

vanadium,

niobium,

tantalum,

molybdenum,

tungsten,

chromium,

nitrides thereof, and

carbides thereof.

12. The method as recited in Claim 8 wherein said creating comprises coupling said resistive layer between a selected signal pad and one of a plurality of ground pads.

13. The method as recited in Claim 8 wherein said creating comprises creating said resistive layer between an entirety of a pad portion of said conductive layer and said piezoelectric substrate.

14. The method as recited in Claim 8 wherein said SAW device comprises two signal pads and four ground pads and said resistive layer is divided into portions that span said two signal pads and said four ground pads.

15. A surface acoustic wave (SAW) filter, comprising:

a piezoelectric substrate;

a conductive layer located over said piezoelectric substrate and forming a network of cooperating SAW devices; and

a resistive layer, interposing a portion of said conductive layer and said piezoelectric substrate, that forms a return path for static charge migrating from said piezoelectric substrate to said conductive layer.

16. The SAW filter as recited in Claim 15 wherein said piezoelectric substrate comprises one selected from the group consisting of:

bismuth germanium oxide,

gallium arsenide,

lithium borate,

lithium niobate,

lithium tantalate,

langasite,

lead zirconium tantalate, and

quartz.

17. The SAW filter as recited in Claim 15 wherein said conductive layer comprises one selected from the group consisting of:

aluminum,

copper,

gold,

silver,

platinum, and

palladium.

18. The SAW filter as recited in Claim 15 wherein said resistive layer comprises one selected from the group consisting of:

silicon,

titanium,

zirconium,

hafnium,

vanadium,

niobium,

tantalum,

molybdenum,

tungsten,

chromium,

nitrides thereof, and

carbides thereof.

19. The SAW filter as recited in Claim 15 wherein said resistive layer couples a selected signal pad to one of a plurality of ground pads.

20. The SAW filter as recited in Claim 15 wherein said resistive layer is interposed between an entirety of a pad portion of said conductive layer and said piezoelectric substrate.

21. The SAW filter as recited in Claim 15 wherein said SAW device comprises two signal pads and four ground pads and said resistive layer is divided into portions that span said two signal pads and said four ground pads.